

irradiation chamber, [located below said preheat chamber and] thermally coupled to said preheat chamber such that heat generated in said irradiation chamber produces heat in said preheat chamber, for receiving a preheated whole waste tire from said preheat chamber;

said apparatus further comprising microwave energy supply means for supplying microwave energy to said irradiation chamber to provide destructive distillation of a preheated whole waste tire received in said irradiation chamber, said microwave energy supply means comprising at least first and second microwave sources positioned on opposite sides of said irradiation chamber for directing microwave energy into said irradiation chamber so as to irradiate both sides of the tire received in said irradiation chamber.

*A1
Cancelled*

2. (Amended) A microwave distillation apparatus as claimed in claim 1 wherein said chambers further comprise a cooling chamber, located below said irradiation chamber, for receiving by-products of said destructive distillation and for providing delivery of said by-products from said housing, and wherein said chambers are vertically arranged.

Claim 13. Please cancel this claim.

Claim 14, line 2, delete "13" and insert --12--;

line 3, delete "said" and insert --two--;

line 6, delete "a" and insert --the--.

Please add the following new claims:

23. A microwave distillation apparatus for providing destructive distillation of whole waste tires, said apparatus comprising:

A2 a housing comprising a plurality of chambers, said chambers including a preheat chamber for providing preheating of a whole waste tire received therein, and an irradiation chamber, located below said preheat chamber and thermally coupled to said preheat chamber such that heat generated in said irradiation chamber produces heat in said preheat chamber, for receiving a preheated whole waste tire from said preheat chamber;

said apparatus further comprising microwave energy supply means for supplying microwave energy to said irradiation chamber to provide destructive distillation of a preheated whole waste tire received in said irradiation chamber, said irradiation chamber including means for supporting the tire substantially vertically therein so as to define a vertical plane and said microwave energy supply means transmitting microwave energy substantially at a right angle to said vertical plane.

22 24. A microwave distillation apparatus as claimed in claim
23 wherein said microwave energy supply means comprises at least
one waveguide having an output and terminating at a wall of said
irradiation chamber, a microwave stirrer located at said output
end of said at least one waveguide, and a microwave transparent
window in said wall through which microwave energy is coupled
from said waveguide into said irradiation chamber.

*BAZ
continued*

23 25. A microwave distillation apparatus as claimed in claim
21 23 wherein said microwave energy supply means comprises at least
first and second waveguides positioned on opposite sides of said
irradiation chamber for directing microwave energy into said
irradiation chamber so as to irradiate both sides of the tire
received in said irradiation chamber. --

REMARKS

Considering the matters raised in the Office Action in the same order as raised, the observation with respect to the informal drawings is noted, and formal drawings will be filed in due course when the application is allowed.

With respect to the objection to the Abstract of the Disclosure, the word "comprising" has been eliminated at line 5.

Claims 1-16 have been rejected under 35 U.S.C. §112, second paragraph, as being "indefinite." Although applicant does not necessarily agree with this rejection, claims 7 and 13-16 have been amended to overcome the particular objection raised.